

**Essential online training** for investigators, technicians, veterinarians, managers, and IACUC members in the laboratory animal science field.

## **ANIMAL CARE & USE COURSES**

### **AALAS Certification Preparation**

CMAR: Preparing for the Animal Resources Exam

Study & Test-Taking Skills

Taking an AALAS Technician Certification Exam

### **ALAT Training (2018)**

- 1: The Field of Laboratory Animal Science
- 2: The Animal Research Environment
- 3: Facility Security & Emergencies
- 4: Occupational Health & Safety
- Unit 1 Review Exam (ALAT 1–4)
- 5: Facility Equipment
- 6: Caging Systems
- 7: The Laboratory Animal Environment
- 8: Housekeeping Tasks & Contamination Control
- 9: Feed & Nutrition
- 10: Husbandry
- Unit 2 Review Exam (ALAT 5–10)
- 11: Animal Procurement & Quarantine
- 12: Medications
- 13: Colony Health Surveillance
- 14: Euthanasia
- Unit 3 Review Exam (ALAT 11–14)
- 15: Introduction to Science & Metrics
- 16: Experimental Design & Methodology
- 17: Heredity & Breeding
- Unit 4 Review Exam (ALAT 15–17)
- 18: Mice
- 19: Rats
- 20: Hamsters
- 21: Gerbils
- 22: Guinea Pigs
- 23: Rabbits
- 24: Cats
- 25: Dogs
- 26: Swine
- 27: Ruminants

- 28: Nonhuman Primates
- 29: Birds
- 30: Fish
- 31: Amphibians
- 32: Ferrets
- 33: Less Common Research Animals
- Unit 5 Review Exam (ALAT 18–33)
- Final Review Exam (ALAT 1–33)
- ALAT Combined Review Exam

### **LAT Training (2021)**

- 1: Animal Research, Funding, and Program Oversight
- 2: Policies, Guidelines & Regulations in Animal Research
- 3: Ethics in Animal Research
- 4: Administrative Responsibilities
- Unit 1 Review Exam (LAT 1–4)
- 5: Laboratory Animal Facility Design & Environmental Management
- 6: The Aquatic Environment
- Unit 2 Review Exam (LAT 5–6)
- 7: Anatomy & Physiology
- 8: Genetics & Breeding Colony Management
- 9: Calculations & Conversions
- Unit 3 Review Exam (LAT 7–9)
- 10: Devices & Equipment for Common Technical Procedures
- 11: Performing Common Technical Procedures
- 12: Research Methodology
- 13: Surgical Instruments & Materials
- 14: Aseptic Technique, Surgical Support & Anesthesia
- Unit 4 Review Exam (LAT 10–14)
- 15: Diseases & Health Conditions
- 16: Emergency Situations
- Unit 5 Review Exam (LAT 15–16)
- Final Review Exam (LAT 1–16)
- LAT Combined Review Exam

## **LATG Training (2016)**

1: Personnel Management  
2: Training  
3: Facility Management  
4: Facility Security and Disaster Planning  
5: Managing Compliance  
6: Health Surveillance and Quality Assurance  
7: Occupational Health and Safety  
Unit 1 Review Exam (LATG)  
8: Biochemistry, Nutrition, and Feed  
9: Molecular Biology  
10: Genetic Engineering  
11: Gnotobiotics  
Unit 2 Review Exam (LATG)  
12: Immunology  
13: Agents of Infectious Disease  
14: Common Health Problems of Laboratory  
Animals  
15: Diagnostic Techniques  
16: Pharmacology  
17: Anesthesia and Analgesia  
18: Experimental Design and Data Handling  
Unit 3 and 4 Review Exam (LATG 12-18)  
Final Review Exam (LATG 01-18)  
LATG Combined Review Exam

## **Anesthesia, Analgesia, & Surgery**

Aseptic Technique for Rodent Survival Surgery  
Humane Endpoints  
Inhalation Anesthesia Systems for Rodents  
Large Animal Surgery: Aseptic Technique and  
Anesthesia  
Pain Management in Laboratory Animals  
Post-Procedure Care of Mice & Rats in  
Research: Minimizing Pain & Distress  
Small Ruminant Anesthesia

## **Animal Health & Wellbeing**

Environmental Enrichment  
Introduction to Laboratory Animal Medicine  
Laboratory Animal Nutrition  
Medical Records

## **Bioimaging**

Magnetic Resonance Imaging  
Optical Imaging  
PET and SPECT Imaging  
Thermography Imaging

## **Biosecurity**

Introduction to VA Biosecurity Concepts

## **Calculations & Statistics**

Basic Metrics for the Laboratory Animal Facility  
Design and Statistical Analysis of Laboratory  
Animal Studies  
Dose Calculations I: Basic  
Dose Calculations II: Advanced  
Fractions, Percentages, & Decimals

## **Common Health Conditions of Mice**

Mice: 1 - Physical Exam  
Mice: 2 - Nonspecific Clinical Conditions  
Mice: 3 - Gastrointestinal Conditions  
Mice: 4 - Integumentary Conditions  
Mice: 5 - Musculoskeletal and Neurological  
Conditions  
Mice: 6 - Ophthalmic Conditions  
Mice: 7 - Reproductive and Urinary Conditions  
Mice: 8 - Respiratory Conditions  
Mice: 9 - Other Clinical Conditions  
Mice: 10 - Emergency Conditions

## **Compliance & IACUC Training**

Animal Protocols: Strategies for Effective  
Review  
Common Compliance Issues  
Essentials for IACUC Members  
IACUC Chair: Role and Responsibilities  
Institutional Official: Role in Laboratory Animal  
Research  
Maintaining Animal Procedure Areas  
Post-Approval Monitoring Refresher: Working  
with the IACUC  
Refresher: Working with the IACUC  
Semiannual Facility Inspection  
Working with the IACUC

## **Facilities, Supplies, & Materials**

Aquatic Animal Husbandry & Management  
Cage Equipment Cleaning Using Mechanical  
Washers  
Laboratory Animal Facility Design  
Microbial Decontamination Principles &  
Chemical Disinfectants  
Personal Protective Equipment for Working in a  
Laboratory Animal Facility

Physical Plant Work in the LAF—Manager  
Physical Plant Work in the LAF—Technician  
Syringes & Needles  
Watering Systems

**Lab Animal Research Support Certificate**  
Introduction to the Program

**Management & Training**

Active Listening  
Communicating with the Non-Native English  
Speaker  
Delegation & Empowerment  
Management and Leadership Fundamentals  
Reaching Out to the Public: A How to Guide  
Standard Operating Procedures (SOPs)  
Team Building  
Time Management & Goal Setting  
Training in Laboratory Animal Science—An  
Overview  
Writing Multiple Choice Questions

**Mandates & Guidelines—Australia**

Australian Code for the Care and Use of  
Animals for Scientific Purpose

**Mandates & Guidelines—U.S.**

Animal Welfare Act Regulations  
AVMA Guidelines for the Euthanasia of  
Animals  
Biosafety in Microbiologic & Biomedical  
Laboratories  
Export Control Regulations  
Good Laboratory Practice Regulations  
Guide for the Care and Use of Agricultural  
Animals in Research and Teaching (4th  
Edition)  
Guide for the Care & Use of Laboratory Animals  
NIH Guidelines for Research with Recombinant  
or Synthetic DNA  
Occupational Health & Safety in the Care & Use  
of Research Animals  
PHS Policy on Humane Care & Use of  
Laboratory Animals  
Working with Controlled Substances

**Occupational Health & Safety**

Bloodborne Pathogens Training  
Compassion Fatigue

Ergonomics: Working Smart Introduction to  
Ergonomics  
Laboratory Animal Allergy  
Working Safely in the Vivarium During a  
Pandemic

**Scientific Reproducibility**

Effect of Macroenvironmental Variables on  
Reproducibility  
Reproducibility in Preclinical Imaging

**Species-Specific Courses**

Introduction to Amphibians  
Introduction to Bats  
Introduction to Birds  
Introduction to Cats  
Introduction to Cattle  
Introduction to Chinchillas  
Introduction to Cotton Rats  
Introduction to Dogs  
Introduction to Ferrets  
Introduction to Fish  
Introduction to Gerbils  
Introduction to Guinea Pigs  
Introduction to Hamsters  
Introduction to Horses  
Introduction to Mice  
Introduction to Monodelphis Opossums  
Introduction to Nonhuman Primates  
Introduction to Rabbits  
Introduction to Rats  
Introduction to Sheep & Goats  
Introduction to Swine  
Introduction to Wildlife  
Introduction to Woodchucks  
Working with Laboratory Xenopus  
Working with Laboratory Zebrafish  
Working with Poultry in the Laboratory  
Working with the Laboratory Dog (5 courses):

- The Basics
- Endotracheal Intubation
- Injections & Blood Collection
- Urinary Catheterization
- Venous Catheterization

Working with the Laboratory Ferret  
Working with the Laboratory Mouse  
Working with the Laboratory Rat

## **Toxicology**

Toxicological Research I: Basics

Toxicological Research II: Drug and Biological  
Product Development

Toxicological Research III: Risk Assessment and  
Policy

## **HUMAN RESEARCH PROTECTIONS LIBRARY**

Human Research Protection Training

## **ANIMAL BIOSAFETY TRAINING PROGRAM LIBRARY**

### **Animal Biosafety Concepts**

Animal Biosafety Training Program Introduction

Animal Biosafety Risk Assessment &  
Management

Animal Facility Designs for Biocontainment  
Biocontainment Equipment

Biosecurity in Animal Biocontainment Facilities

Concepts & Practices of Animal Biosafety:  
ABSL-2 & 3

Incident Planning & Response within the Animal  
Biocontainment Facility

Institutional Responsibilities & Animal  
Biosafety

Microbiological Decontamination in  
Biocontainment

Occupational Health & Animal Biosafety  
Select Agents & Toxins Regulations

### **Animal Biosafety Species-Specific**

Working Safely with Laboratory Animals in  
Biocontainment

Working Safely with Nonhuman Primates in  
Biocontainment

Working Safely with Poultry in Biocontainment

Working Safely with Rabbits & Ferrets in  
Biocontainment

Working Safely with Rodents in Biocontainment

Working Safely with Ungulates in  
Biocontainment

## **RESEARCH ETHICS LIBRARY**

### **Bioethics**

Ethical Case 1: Mouse in a Parasitology  
Experiment

Ethical Case 2: Rat with Partial Paralysis

Ethical Decision-Making in Animal Research

### **Responsible Conduct of Research**

Avoiding Financial Conflict of Interest in  
Federal Research

Responsible Conduct of Research: Introduction  
Responsible Conduct of Research Part 1: Shared  
Values

Responsible Conduct of Research Part 2:  
Planning Research

Responsible Conduct of Research Part 3:  
Conducting Research

Responsible Conduct of Research Part 4:  
Reporting and Reviewing Research

## **TRANSGENICS TRAINING PROGRAM LIBRARY**

### **Transgenics Core Courses**

Introduction to the AALAS Transgenics  
Training Program

Colony Management I: Breeding and  
Recordkeeping

Colony Management II: Daily Workflow

Colony Management III: Plans and Strategies

Genetics: The Basics

Genetics: Transgenic Mice

Transgenic and Gene-Targeted Technology

### **Transgenics Strain Nomenclature**

Nomenclature: Mice

Nomenclature: Rats

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